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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,666	09/24/2003	Junsaku Nakajima	49954 DIV-1 (70551)	8361

7590 06/02/2006  
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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/670,666

Applicant(s)

NAKAJIMA ET AL.

Examiner

Jorge L. Ortiz-Criado

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5-33 is/are pending in the application.
- 4a) Of the above claim(s) 15-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I claims 5-14, in the reply filed on 04/04/2006 is acknowledged.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 5-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wachi J.P. Publication No. 07-021588.

Regarding claim 5, Wachi discloses an optical disc including a substrate having pits (11, 16) having at least two different depths formed therein, wherein the pits have their depths adjusted such that polarity of a signal representing difference in intensity distribution of a reflected light beam along a tangential direction of a pit string differ at a pit having a first depth from a pit having a second depth (see Abstract; Fig. 1).

Regarding claim 6, Wachi discloses an optical disc (10) including a substrate having pits (11, 16) having at least two different depths formed therein, wherein information is recorded in

accordance with a polarity of a signal representing difference in intensity distribution of a reflected light beam along a tangential direction of a pit string, at said pits having at least two different depths (see Abstract; Fig. 1).

Regarding claim 7, Wachi discloses an optical disc (10) including a substrate having pits (11, 16) having at least two different depths formed therein, wherein information is recorded by a combination of a signal in accordance with quantity of reflected light beam from said pits having at least two different depths and a signal indicative of a difference in intensity distribution of the reflected light beam along a tangential direction of a pit string (see Abstract; Fig. 1).

Regarding claim 7, Wachi discloses an optical disc (10) including a substrate having pits (11, 16) having at least two different depths formed therein, wherein main information (13) is recorded by a form of the pits, and additional information (18) is recorded by the depth of a pit (see Abstract; Fig. 1).

Regarding claim 9, Wachi discloses wherein the pit having said additional information is formed deeper than a prescribed depth (see Abstract; Fig. 1).

In regard to claim 10, Wachi discloses wherein said additional information is a synchronizing signal for reproducing said optical disc (see Fig. 1, information 18).

In regard to claim 11, Wachi discloses wherein said additional information is address information (18) corresponding to said main information (see Fig. 1, information 18).

In regard to claim 14, Wachi discloses wherein unit of recording of said additional information is recorded in association with a unit of recording of said main information (see Abstract; Fig. 1).

In regard to claims 12-13, wherein said additional information is a de-scramble key of said main information, error correction information for said main information (this features are merely assisting information necessary for reproducing information of the optical disc that additional information may include in the conventional optical discs, inherently present in Wachi).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited reference are related to an optical disk an optical disc including a substrate having pits having at least two different depths formed therein, wherein the pits have their depths adjusted.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(12:30 pm- 9:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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**WAYNE YOUNG**  
SUPERVISORY PATENT EXAMINER